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PASSWORD:
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NEWS 2		"Ask CAS" for self-help around the clock
NEWS 3	JUL 20	Powerful new interactive analysis and visualization software, STN AnaVist, now available
NEWS 4	AUG 11	STN AnaVist workshops to be held in North America
NEWS 5	AUG 30	CA/CAplus -Increased access to 19th century research documents
NEWS 6	AUG 30	CASREACT - Enhanced with displayable reaction conditions
NEWS 7	SEP 09	ACD predicted properties enhanced in REGISTRY/ZREGISTRY
NEWS 8	OCT 03	MATHDI removed from STN
NEWS 9	OCT 04	CA/CAplus-Canadian Intellectual Property Office (CIPO) added to core patent offices
NEWS 10	OCT 06	STN AnaVist workshops to be held in North America
NEWS 11	OCT 13	New CAS Information Use Policies Effective October 17, 2005
NEWS 12	OCT 17	STN(R) AnaVist(TM), Version 1.01, allows the export/download of CAplus documents for use in third-party analysis and visualization tools
NEWS 13	OCT 27	Free KWIC format extended in full-text databases
NEWS 14	OCT 27	DIOGENES content streamlined
NEWS 15	OCT 27	EPFULL enhanced with additional content

NEWS EXPRESS	JUNE 13 CURRENT WINDOWS VERSION IS V8.0, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 13 JUNE 2005
NEWS HOURS	STN Operating Hours Plus Help Desk Availability
NEWS INTER	General Internet Information
NEWS LOGIN	Welcome Banner and News Items
NEWS PHONE	Direct Dial and Telecommunication Network Access to STN
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* * * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 08:06:22 ON 04 NOV 2005

=>
Uploading
THIS COMMAND NOT AVAILABLE IN THE CURRENT FILE
Do you want to switch to the Registry File?

```
Choice (Y/n):
Switching to the Registry File...
Some commands only work in certain files.  For example, the EXPAND
command can only be used to look at the index in a file which has an
index.  Enter "HELP COMMANDS" at an arrow prompt (=>) for a list of
commands which can be used in this file.

=> FILE REGISTRY

COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                       0.21       0.21

FILE 'REGISTRY' ENTERED AT 08:06:35 ON 04 NOV 2005
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STRUCTURE FILE UPDATES:    2 NOV 2005  HIGHEST RN 866586-00-7
DICTIONARY FILE UPDATES:   2 NOV 2005  HIGHEST RN 866586-00-7

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TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

*********************************************************************
*                                                                   *
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added,   *
* effective March 20, 2005.  A new display format, IDERL, is now    *
* available and contains the CA role and document type information. *
*                                                                   *
*********************************************************************

Structure search iteration limits have been increased.  See HELP SLIMITS
for details.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document.  For information
on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

=>
Uploading C:\Program Files\Stnexp\Queries\10784576.str
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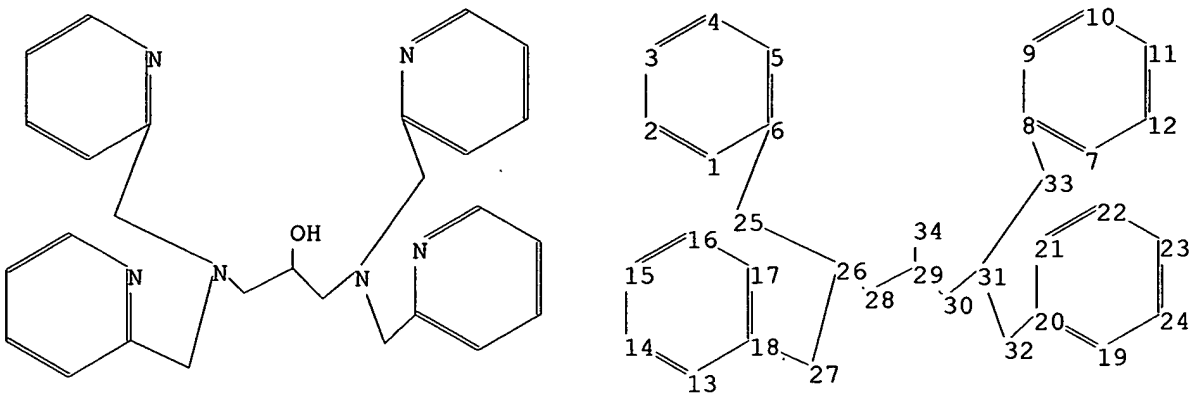
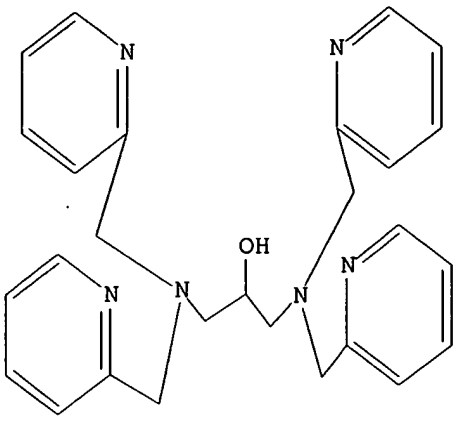


chain nodes :
25 26 27 28 29 30 31 32 33 34
ring nodes :
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
24
chain bonds :
6-25 8-33 18-27 20-32 25-26 26-27 26-28 28-29 29-30 29-34 30-31 31-32
31-33
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 13-14 13-18
14-15 15-16 16-17 17-18 19-20 19-24 20-21 21-22 22-23 23-24
exact/norm bonds :
25-26 26-27 26-28 29-34 30-31 31-32 31-33
exact bonds :
6-25 8-33 18-27 20-32 28-29 29-30
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 13-14 13-18
14-15 15-16 16-17 17-18 19-20 19-24 20-21 21-22 22-23 23-24
isolated ring systems :
containing 1 : 7 : 13 : 19 :

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom
20:Atom 21:Atom 22:Atom 23:Atom 24:Atom 25:CLASS 26:CLASS 27:CLASS 28:CLASS
29:CLASS 30:CLASS 31:CLASS 32:CLASS 33:CLASS 34:CLASS

L1 STRUCTURE UPLOADED

=> d l1
L1 HAS NO ANSWERS
L1 STR



Structure attributes must be viewed using STN Express query preparation.

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=> s l1
SAMPLE SEARCH INITIATED 08:06:55 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -        3 TO ITERATE

100.0% PROCESSED         3 ITERATIONS                          1 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:             3 TO      163
PROJECTED ANSWERS:                1 TO       80

L2             1 SEA SSS SAM L1

=> s l1 sss full
FULL SEARCH INITIATED 08:07:03 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -       90 TO ITERATE

100.0% PROCESSED       90 ITERATIONS                         23 ANSWERS
SEARCH TIME: 00.00.01

L3            23 SEA SSS FUL L1

=> FIL CAPLUS
COST IN U.S. DOLLARS                          SINCE FILE      TOTAL
                                                 ENTRY    SESSION
FULL ESTIMATED COST                             161.33     161.54

FILE 'CAPLUS' ENTERED AT 08:07:22 ON 04 NOV 2005
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PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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FILE COVERS 1907 - 4 Nov 2005 VOL 143 ISS 20
FILE LAST UPDATED: 3 Nov 2005 (20051103/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply.
They are available for your review at:

http://www.cas.org/infopolicy.html

```
=> s l3
L4          40 L3

=> s l4 and (conjugate or label? or functional group or peptide or biotin or
linker)
         62505 CONJUGATE
         55497 CONJUGATES
         96644 CONJUGATE
                 (CONJUGATE OR CONJUGATES)
        423603 LABEL?
        496387 FUNCTIONAL
          4050 FUNCTIONALS
        497487 FUNCTIONAL
                 (FUNCTIONAL OR FUNCTIONALS)
       1495580 GROUP
        974461 GROUPS
       2091426 GROUP
                 (GROUP OR GROUPS)
         69031 FUNCTIONAL GROUP
                 (FUNCTIONAL(W)GROUP)
        338860 PEPTIDE
        248049 PEPTIDES
        433953 PEPTIDE
                 (PEPTIDE OR PEPTIDES)
         28266 BIOTIN
           107 BIOTINS
         28275 BIOTIN
                 (BIOTIN OR BIOTINS)
         18385 LINKER
          4342 LINKERS
         20879 LINKER
                 (LINKER OR LINKERS)
L5           5 L4 AND (CONJUGATE OR LABEL? OR FUNCTIONAL GROUP OR PEPTIDE OR
               BIOTIN OR LINKER)

=> d l5 ibib abs hitstr tot

L5   ANSWER 1 OF 5  CAPLUS  COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:        2005:398746  CAPLUS
DOCUMENT NUMBER:         143:93356
TITLE:                   Detection and Quantification of On-Chip Phosphorylated
                         Peptides by Surface Plasmon Resonance Imaging
                         Techniques Using a Phosphate Capture Molecule
AUTHOR(S):               Inamori, Kazuki; Kyo, Motoki; Nishiya, Yoshiaki;
                         Inoue, Yusuke; Sonoda, Tatsuhiko; Kinoshita, Eiji;
                         Koike, Tohru; Katayama, Yoshiki
CORPORATE SOURCE:        Biotechnology Frontier Project, Toyobo Co. Ltd.,
                         Tsuruga, Fukui, 914-0047, Japan
SOURCE:                  Analytical Chemistry (2005), 77(13), 3979-3985
                         CODEN: ANCHAM; ISSN: 0003-2700
PUBLISHER:               American Chemical Society
DOCUMENT TYPE:           Journal
```

LANGUAGE: English

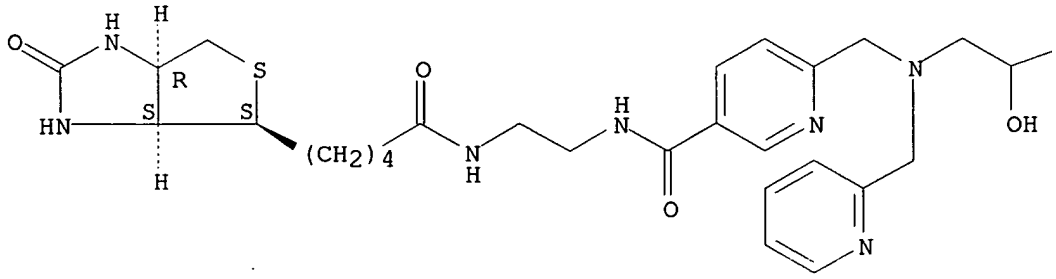
AB The authors describe herein a detection and quantification system for on-chip phosphorylation of **peptides** by surface plasmon resonance (SPR) imaging techniques using a newly synthesized phosphate capture mol. (i.e., biotinylated zinc(II) complex). The biotinylated compound is a dinuclear zinc(II) complex that is suitable for accessing phosphate anions as a bridging ligand on the two zinc(II) ions. The compound was exposed on the **peptide** array and detected with streptavidin (SA) via a **biotin**-SA interaction by SPR imaging. In the conventional method using antibody, both anti-phosphoserine and anti-phosphotyrosine antibodies were required for phosphoserine and phosphotyrosine detection, resp. Detection of the phosphate group by the zinc(II) complex, however, was independent of the phosphorylated amino acid residues. The calibration curve for the phosphorylation ratios was established with a calibration chip, on which phosphoserine-containing **peptide** probes were immobilized. The **peptide** probes, which were phosphorylated on the surface by protein kinase A, were detected and quantified by SPR imaging using the zinc(II) complex, SA, and anti-SA antibody. The reaction rate and the kinetics of on-chip phosphorylation were also evaluated with the **peptide** array. The phosphorylation ratio was saturated at .apprx.20% in 2 h in this study.

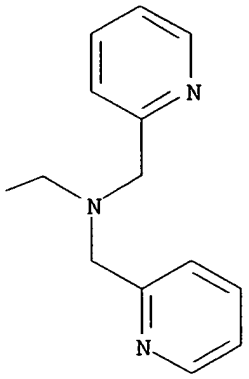
IT **753451-66-0P**
RL: PUR (Purification or recovery); SPN (Synthetic preparation); PREP (Preparation)
(preparation and reaction with zinc)

RN 753451-66-0 CAPLUS

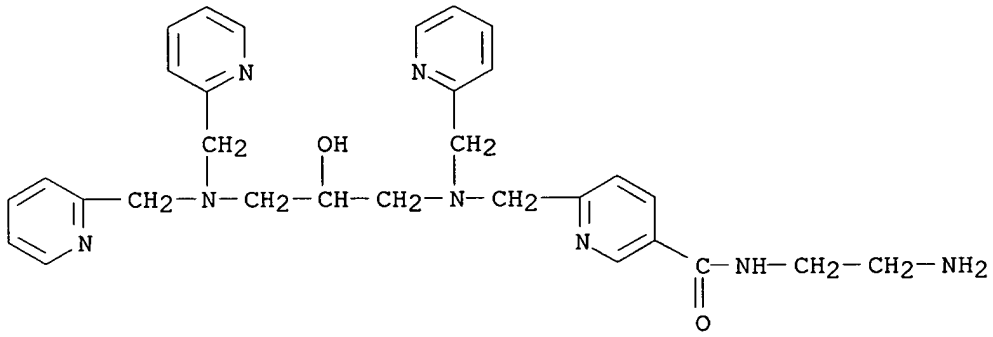
CN 1H-Thieno[3,4-d]imidazole-4-pentanamide, N-[2-[[[6-[[[3-[bis(2-pyridinylmethyl)amino]-2-hydroxypropyl](2-pyridinylmethyl)amino]methyl]-3-pyridinyl]carbonyl]amino]ethyl]hexahydro-2-oxo-, (3aS,4S,6aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.





IT **753451-64-8**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction with succuinimidyl biotinate in synthesis of [[biotinaminoethylcarbamoyl]pyridinylmethyl]tris(pyridin-2-ylmethyl)diaminopropanol)
RN 753451-64-8 CAPLUS
CN 3-Pyridinecarboxamide, N-(2-aminoethyl)-6-[[[3-[bis(2-pyridinylmethyl)amino]-2-hydroxypropyl](2-pyridinylmethyl)amino]methyl]- (9CI) (CA INDEX NAME)



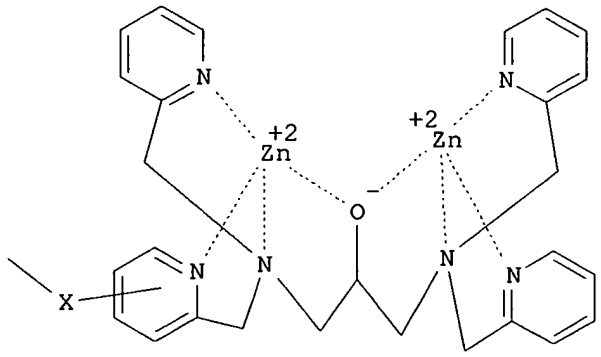
REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2005:371479 CAPLUS
DOCUMENT NUMBER: 142:438383
TITLE: Method of measuring surface plasmon resonance and noble metal compound for use in the method
INVENTOR(S): Koike, Tohru; Kawasaki, Akihiko; Kobashi, Tatsuhiro; Takahagi, Makoto
PATENT ASSIGNEE(S): Kabushiki Kaisha Nard Kenkyusho, Japan
SOURCE: PCT Int. Appl., 32 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

WO 2005038442 A1 20050428 WO 2004-JP15347 20041012
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
PRIORITY APPLN. INFO.: JP 2003-356934 A 20031016
JP 2004-44035 A 20040220
JP 2004-94160 A 20040329

GI



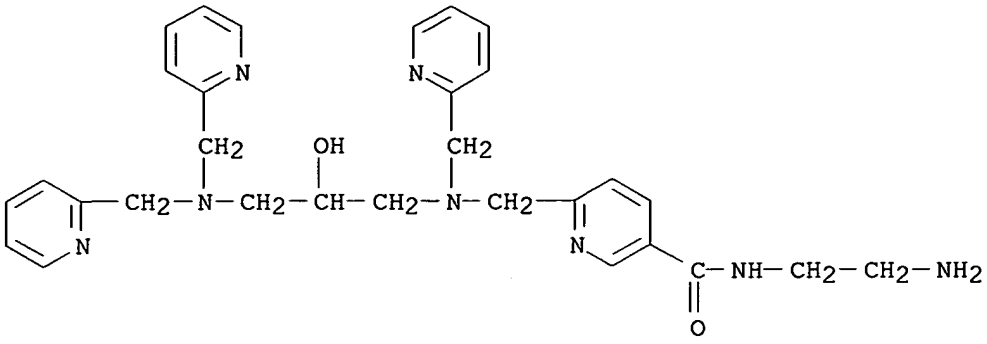
I

AB A method of measuring a surface plasmon resonance, in which the presence of phosphorylated **peptide** (protein) can be easily detected from a biosample or the like and in which whether or not **peptides** are phosphorylated can be judged; and a noble metal compound that exhibits high capability of coordinate bonding with phosphorylated **peptides** to thereby enable suitable use in this method. There is provided a 1st method of measuring a surface plasmon resonance, comprising disposing a noble metal compound on a prism bottom surface, exposing the prism to light and detecting any reflected light, wherein as the noble metal compound, one having a substituent I is employed on the side opposite to the side in contact with the prism and wherein in the noble metal compound, a test specimen is added to the side having the substituent I [X = **linker** group to noble metal].

IT **753451-64-8P**
RL: ARU (Analytical role, unclassified); PNU (Preparation, unclassified); ANST (Analytical study); PREP (Preparation)
(phos-tag precursor; noble metal compound for detecting phosphorylated **peptides**)

RN 753451-64-8 CAPLUS

CN 3-Pyridinecarboxamide, N-(2-aminoethyl)-6-[[[3-[bis(2-pyridinylmethyl)amino]-2-hydroxypropyl](2-pyridinylmethyl)amino]methyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:756986 CAPLUS
DOCUMENT NUMBER: 141:256962
TITLE: Method for measuring molecular weight of phosphoric acid monoester compound, and additive for mass spectrum measurement
INVENTOR(S): Koike, Tohru; Minami, Norio; Kawasaki, Akihiko
PATENT ASSIGNEE(S): Kabushiki Kaisha Nard Kenkyusho, Japan
SOURCE: PCT Int. Appl., 33 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

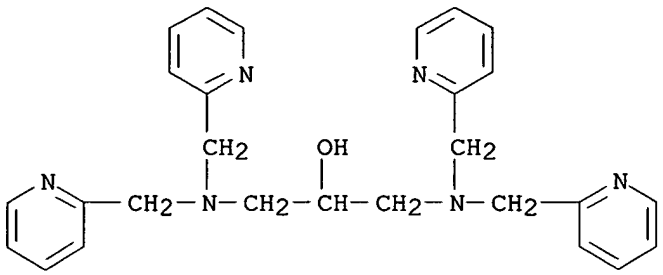
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004079358	A1	20040916	WO 2003-JP16512	20031224
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
JP 2004294425	A2	20041021	JP 2003-424431	20031222

PRIORITY APPLN. INFO.: JP 2003-61939 A 20030307
OTHER SOURCE(S): MARPAT 141:256962

AB A method is provided for not only confirming the presence of a compound having been converted to a phosphoric acid monoester (e.g., **peptide**, carbohydrate) even with respect to, for example, any biol. sample containing multiple compds., but also easily measuring the mol. weight of the phosphoric acid monoester compound Also provided is an additive for mass spectrum measurement used in this method. The method comprises obtaining multiple mass spectrum data using a coordination compound which exhibits the extremely high coordination capacity for a phosphoric acid monoester group and is constituted with a single zinc isotope (e.g., 64Zn, 68Zn, natural isotope Zn), and comparing them with each other.

IT **122413-32-5**
RL: RCT (Reactant); RACT (Reactant or reagent)
(method for measuring mol. weight of phosphoric acid monoester compound by mass spectrometry using coordination compound additive)

RN 122413-32-5 CAPLUS
CN 2-Propanol, 1,3-bis[bis(2-pyridinylmethyl)amino]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:756633 CAPLUS
DOCUMENT NUMBER: 141:257002
TITLE: Trapping agent for substance having anionic substituting group
INVENTOR(S): Koike, Tohru; Yamamoto, Yohsuke; Takeda, Hironori; Sano, Yoshio
PATENT ASSIGNEE(S): Manac Inc., Japan
SOURCE: PCT Int. Appl., 27 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004078342	A1	20040916	WO 2003-JP2484	20030304
W: DE, JP, US				
WO 2004078828	A1	20040916	WO 2004-JP2730	20040304
W: AE, AE, AG, AL, AL, AM, AM, AM, AT, AT, AU, AZ, AZ, BA, BB, BG, BG, BR, BR, BW, BY, BY, BZ, BZ, CA, CH, CN, CN, CO, CO, CR, CR, CU, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EC, EE, EE, EG, ES, ES, FI, FI, GB, GD, GE, GE, GH, GM, HR, HR, HU, HU, ID, IL, IN, IS, JP, JP, KE, KE, KG, KG, KP, KP, KP, KR, KR, KZ, KZ, KZ, LC, LK, LR, LS, LS, LT, LU, LV, MA, MD, MD, MG, MK, MN, MW, MX, MX, MZ, MZ, NA, NI				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

PRIORITY APPLN. INFO.: WO 2003-JP2484 A 20030304

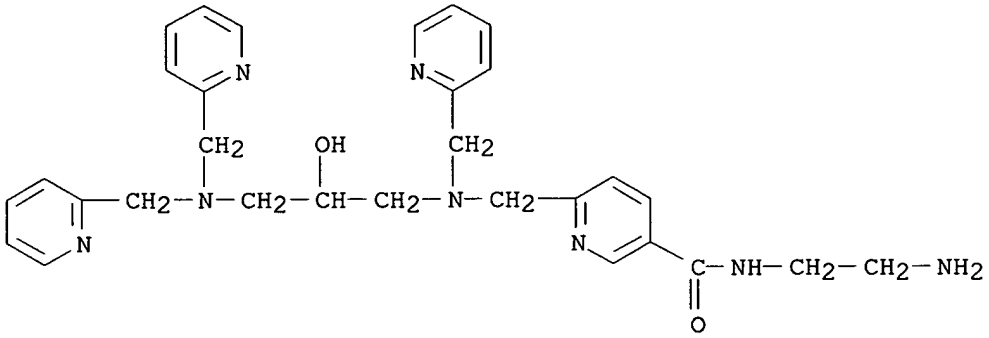
AB A trapping agent for a substance having an anionic substituting group is provided, which is a polymer support capable of trapping an anionic substituting group (e.g., phosphate group) by possessing the property of binding with the anionic substituting group (e.g., phosphate group) under a certain condition. The polymer support is sparingly solvent-soluble, preferably solvent-insol., as a whole, and a specific zinc coordination group which is easily separated and purified. is bound to it by a covalent bond directly or through a spacer.

IT **753451-64-8 756534-84-6**
RL: RCT (Reactant); RACT (Reactant or reagent)
(trapping agent with zinc coordination compound group for substance

having anionic substituting group)

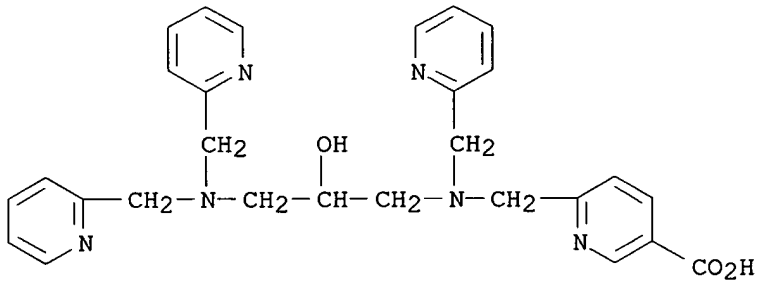
RN 753451-64-8 CAPLUS

CN 3-Pyridinecarboxamide, N-(2-aminoethyl)-6-[[[3-[bis(2-pyridinylmethyl)amino]-2-hydroxypropyl](2-pyridinylmethyl)amino]methyl]- (9CI) (CA INDEX NAME)



RN 756534-84-6 CAPLUS

CN 3-Pyridinecarboxylic acid, 6-[[[3-[bis(2-pyridinylmethyl)amino]-2-hydroxypropyl](2-pyridinylmethyl)amino]methyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:732311 CAPLUS

DOCUMENT NUMBER: 141:256991

TITLE: Method for **labeling** phosphorylated **peptides**, complex compounds used in the methods, process for producing the same, and their intermediates

INVENTOR(S): Koike, Tohru; Kawasaki, Akihiko; Kobashi, Tatsuhiro; Takahagi, Makoto

PATENT ASSIGNEE(S): Kabushiki Kaisha Nard Kenkyusho, Japan

SOURCE: Eur. Pat. Appl., 39 pp.
CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1455189	A1	20040908	EP 2004-4112	20040224
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				

WO 2004078724 A1 20040916 WO 2004-JP2048 20040223
W: AE, AE, AG, AL, AL, AM, AM, AM, AT, AT, AU, AZ, AZ, BA, BB, BG, BG, BR, BR, BW, BY, BY, BZ, BZ, CA, CH, CO, CO, CR, CR, CU, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EC, EE, EE, EG, ES, ES, FI, FI, GB, GD, GE, GE, GH, GM, HR, HR, HU, HU, ID, IL, IN, IS, KE, KE, KG, KG, KP, KP, KP, KR, KR, KZ, KZ, KZ, LC, LK, LR, LS, LS, LT, LU, LV, MA, MD, MD, MG, MK, MN, MW, MX, MX, MZ, MZ, NA, NI, NI, NO, NZ, OM
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
US 2004198712 A1 20041007 US 2004-784576 20040223
CN 1526724 A 20040908 CN 2004-10007684 20040224
PRIORITY APPLN. INFO.: JP 2003-56068 A 20030303
JP 2003-113707 A 20030418
JP 2003-356934 A 20031016

OTHER SOURCE(S): MARPAT 141:256991

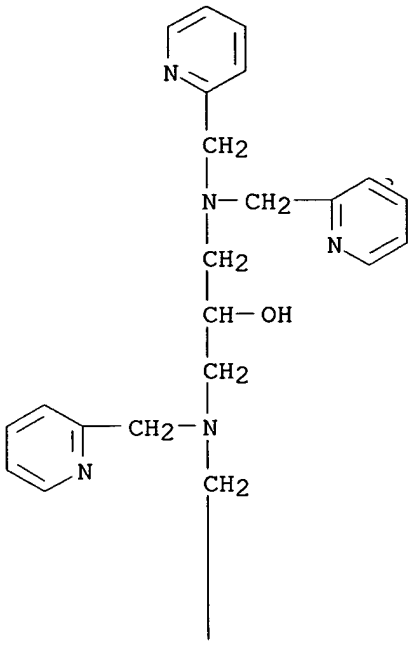
AB Provided are a method for easily detecting phosphorylated **peptides**, namely, proteins, in samples derived from living organisms or the like, a method for selectively adsorbing the phosphorylated **peptides**, and compds. that are highly coordinated to the phosphorylated **peptides** and usable in the methods. The complex compound is represented by the formula: wherein X is a **linker** moiety, and Y is a **labeling** group. The compound (I) is highly coordinated to a phosphorylated **peptide**. and has a **labeling** group. Accordingly, with use of the compound (I), the phosphorylated **peptide** can be easily identified.

IT **753451-75-1P 753451-76-2P**
RL: ARU (Analytical role, unclassified); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation)
(method for **labeling** phosphorylated **peptides**, complex compds. used in methods, process for producing the same, and their intermediates)

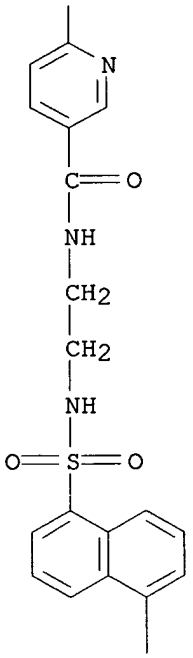
RN 753451-75-1 CAPLUS

CN 3-Pyridinecarboxamide, 6-[[[3-[bis(2-pyridinylmethyl)amino]-2-hydroxypropyl](2-pyridinylmethyl)amino]methyl]-N-[2-[[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]amino]ethyl]- (9CI) (CA INDEX NAME)

PAGE 1-A



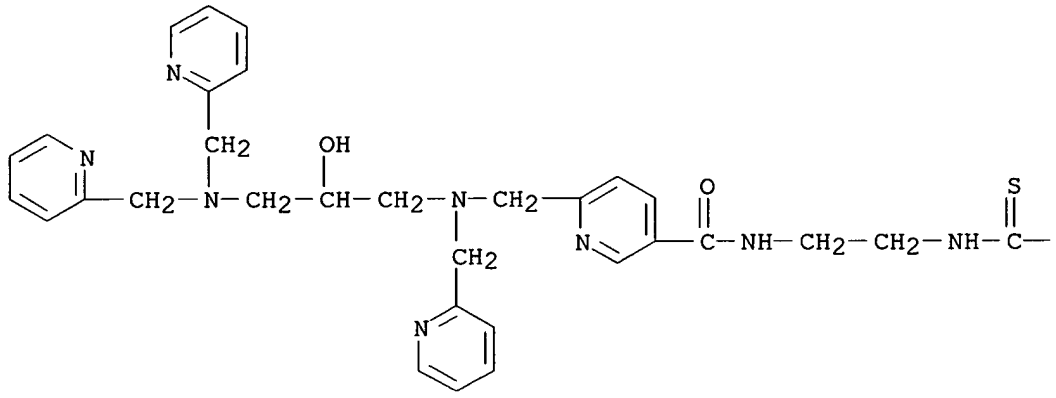
PAGE 2-A



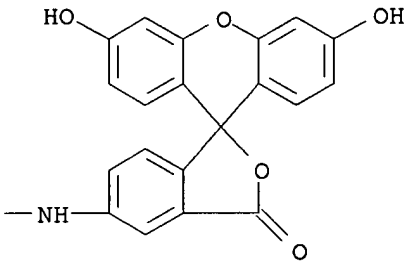
PAGE 3-A

RN 753451-76-2 CAPLUS
CN 3-Pyridinecarboxamide, 6-[[[3-[bis(2-pyridinylmethyl)amino]-2-hydroxypropyl](2-pyridinylmethyl)amino]methyl]-N-[2-[[[(3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl)amino]thioxomethyl]amino]ethyl]- (9CI) (CA INDEX NAME)

PAGE 1-A

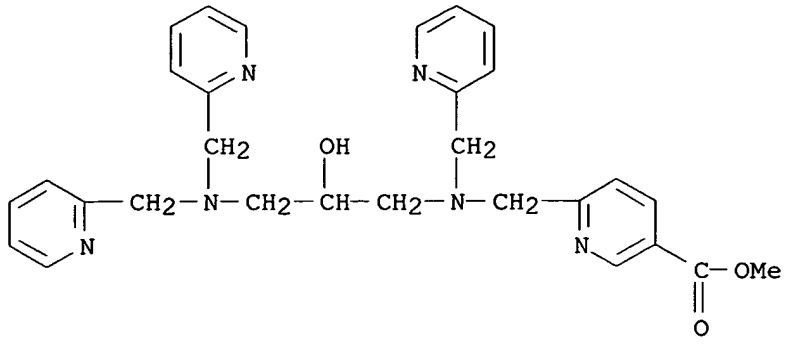


PAGE 1-B

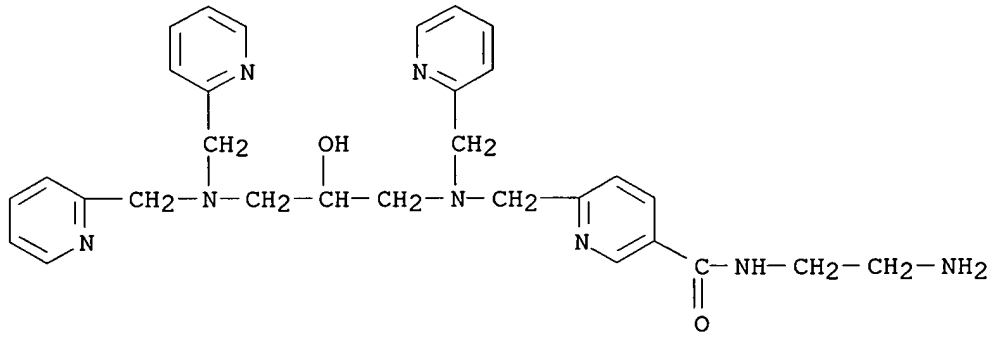


IT **753451-63-7P 753451-64-8P 753451-65-9P**
753451-66-0P 753451-67-1P 753451-68-2P
753451-69-3P 753451-70-6P 753451-71-7P
753451-72-8P 753451-73-9P 753451-74-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(method for **labeling** phosphorylated **peptides**, complex compds. used in methods, process for producing the same, and their intermediates)

RN 753451-63-7 CAPLUS
CN 3-Pyridinecarboxylic acid, 6-[[[3-[bis(2-pyridinylmethyl)amino]-2-hydroxypropyl](2-pyridinylmethyl)amino]methyl]-, methyl ester (9CI) (CA INDEX NAME)

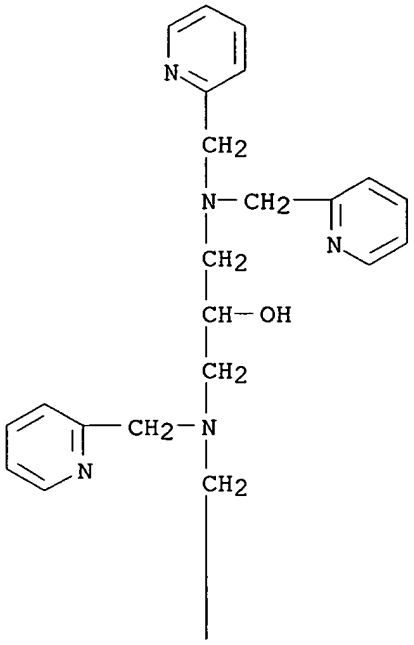


RN 753451-64-8 CAPLUS
CN 3-Pyridinecarboxamide, N-(2-aminoethyl)-6-[[[3-[bis(2-pyridinylmethyl)amino]-2-hydroxypropyl](2-pyridinylmethyl)amino]methyl]- (9CI) (CA INDEX NAME)

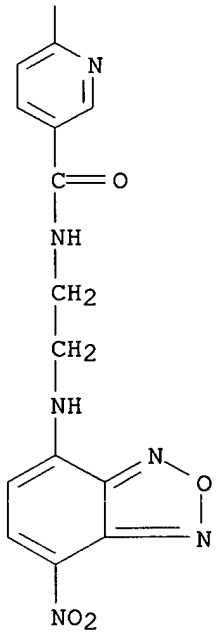


RN 753451-65-9 CAPLUS
CN 3-Pyridinecarboxamide, 6-[[[3-[bis(2-pyridinylmethyl)amino]-2-hydroxypropyl](2-pyridinylmethyl)amino]methyl]-N-[2-[(7-nitro-2,1,3-benzoxadiazol-4-yl)amino]ethyl]- (9CI) (CA INDEX NAME)

PAGE 1-A



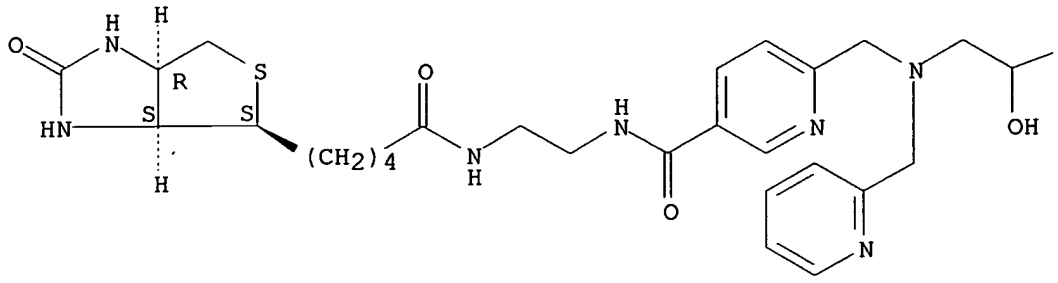
PAGE 2-A



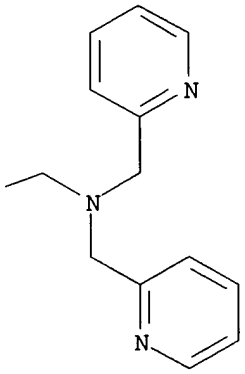
RN 753451-66-0 CAPLUS
CN 1H-Thieno[3,4-d]imidazole-4-pentanamide, N-[2-[[[6-[[[3-[bis(2-pyridinylmethyl)amino]-2-hydroxypropyl](2-pyridinylmethyl)amino]methyl]-3-pyridinyl]carbonyl]amino]ethyl]hexahydro-2-oxo-, (3aS,4S,6aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



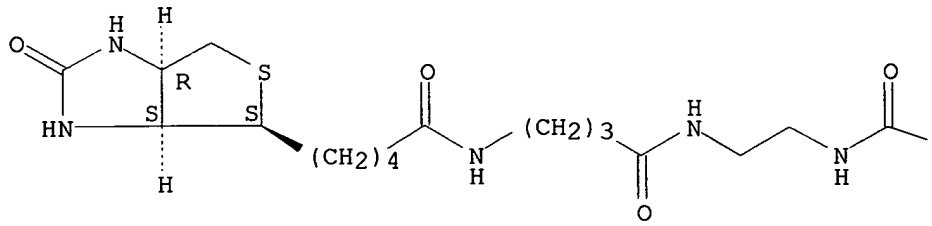
PAGE 1-B

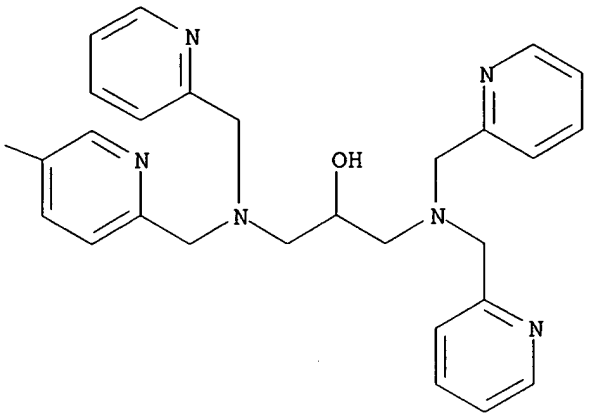


RN 753451-67-1 CAPLUS
CN 1H-Thieno[3,4-d]imidazole-4-pentanamide, N-[4-[[2-[[[6-[[[3-[bis(2-pyridinylmethyl)amino]-2-hydroxypropyl](2-pyridinylmethyl)amino]methyl]-3-pyridinyl]carbonyl]amino]ethyl]amino]-4-oxobutyl]hexahydro-2-oxo-, (3aS,4S,6aR)- (9CI) (CA INDEX NAME)

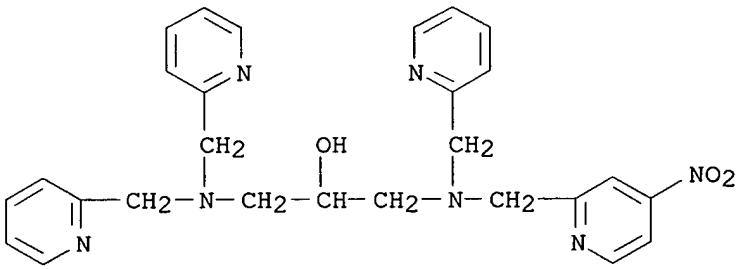
Absolute stereochemistry.

PAGE 1-A

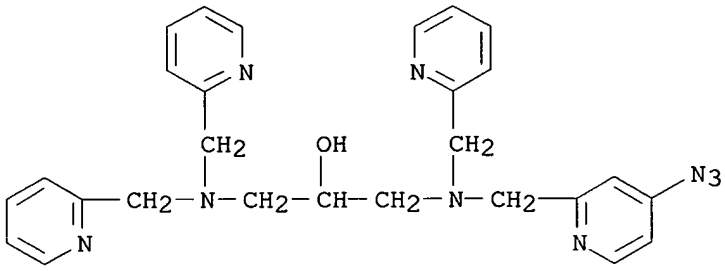




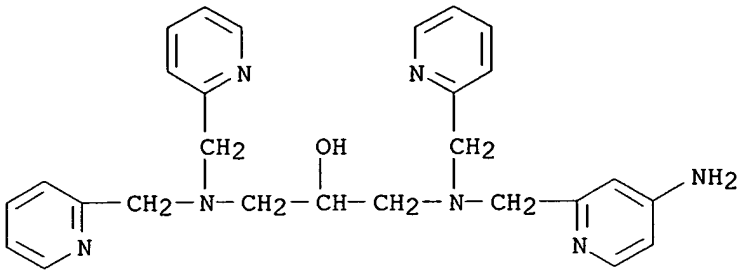
RN 753451-68-2 CAPLUS
CN 2-Propanol, 1-[bis(2-pyridinylmethyl)amino]-3-[[(4-nitro-2-pyridinyl)methyl](2-pyridinylmethyl)amino]- (9CI) (CA INDEX NAME)



RN 753451-69-3 CAPLUS
CN 2-Propanol, 1-[[(4-azido-2-pyridinyl)methyl](2-pyridinylmethyl)amino]-3-[bis(2-pyridinylmethyl)amino]- (9CI) (CA INDEX NAME)

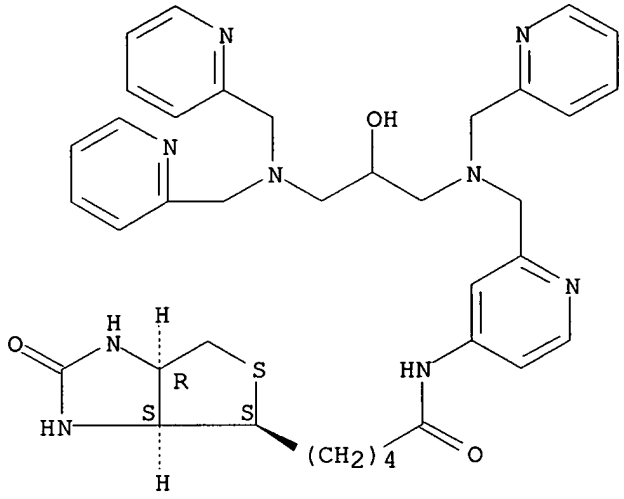


RN 753451-70-6 CAPLUS
CN 2-Propanol, 1-[[(4-amino-2-pyridinyl)methyl](2-pyridinylmethyl)amino]-3-[bis(2-pyridinylmethyl)amino]- (9CI) (CA INDEX NAME)



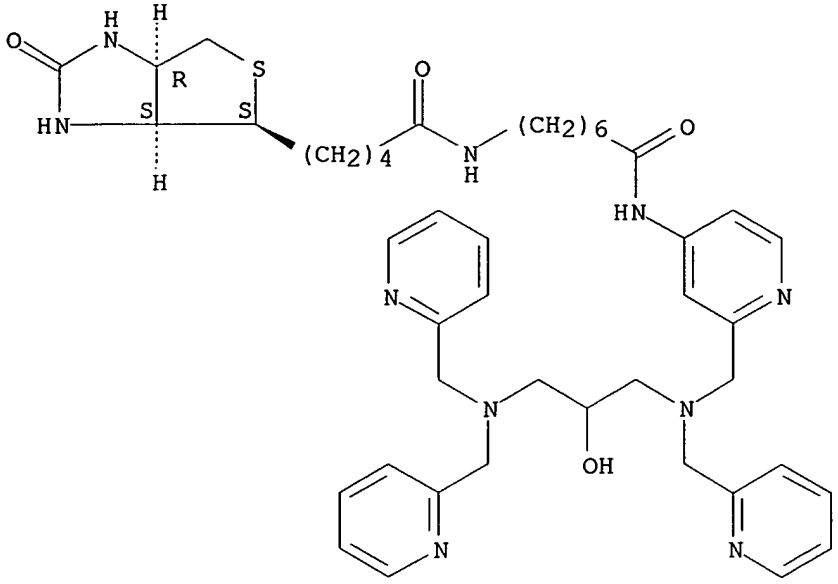
RN 753451-71-7 CAPLUS
CN 1H-Thieno[3,4-d]imidazole-4-pentanamide, N-[2-[[[3-[bis(2-pyridinylmethyl)amino]-2-hydroxypropyl](2-pyridinylmethyl)amino]methyl]-4-pyridinyl]hexahydro-2-oxo-, (3aS,4S,6aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

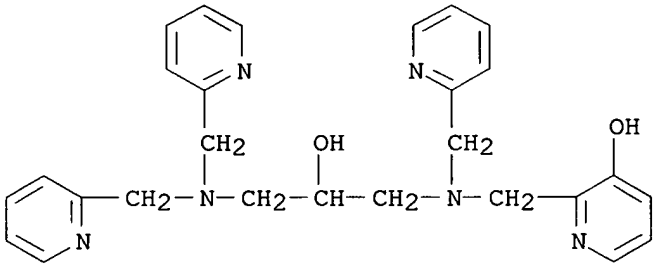


RN 753451-72-8 CAPLUS
CN 1H-Thieno[3,4-d]imidazole-4-pentanamide, N-[7-[[2-[[[3-[bis(2-pyridinylmethyl)amino]-2-hydroxypropyl](2-pyridinylmethyl)amino]methyl]-4-pyridinyl]amino]-7-oxoheptyl]hexahydro-2-oxo-, (3aS,4S,6aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

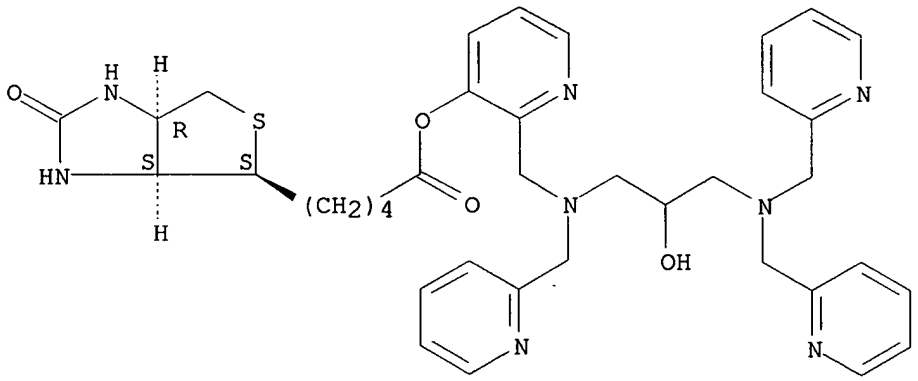


RN 753451-73-9 CAPLUS
CN 3-Pyridinol, 2-[[[3-[bis(2-pyridinylmethyl)amino]-2-hydroxypropyl](2-pyridinylmethyl)amino]methyl]- (9CI) (CA INDEX NAME)



RN 753451-74-0 CAPLUS
CN 1H-Thieno[3,4-d]imidazole-4-pentanoic acid, hexahydro-2-oxo-, 2-[[[3-[bis(2-pyridinylmethyl)amino]-2-hydroxypropyl](2-pyridinylmethyl)amino]methyl]-3-pyridinyl ester, (3aS,4S,6aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



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L4 IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=> s l4 and complex
       1226916 COMPLEX
        698516 COMPLEXES
       1510250 COMPLEX
                 (COMPLEX OR COMPLEXES)
L6           36 L4 AND COMPLEX

=> s l4 and (zinc or Zn)
        565820 ZINC
            97 ZINCS
        565839 ZINC
                 (ZINC OR ZINCS)
        457926 ZN
         26638 ZNS
        478356 ZN
                 (ZN OR ZNS)
L7           12 L4 AND (ZINC OR ZN)

=> s l7 not L5
L8            9 L7 NOT L5

=> d l8 ibib abs hitstr tot

L8   ANSWER 1 OF 9  CAPLUS  COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:         2004:931066  CAPLUS
DOCUMENT NUMBER:          141:391518
TITLE:                    Method and reagent for regulating enzymic activity
INVENTOR(S):              Nishiya, Yoshiaki; Tsuji, Katsumi; Komatsubara,
                          Shusuke; Koike, Toru
PATENT ASSIGNEE(S):       Toyobo Co., Ltd., Japan
SOURCE:                   Jpn. Kokai Tokkyo Koho, 16 pp.
                          CODEN: JKXXAF
DOCUMENT TYPE:            Patent
LANGUAGE:                 Japanese
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.           KIND   DATE        APPLICATION NO.         DATE
     ---------------      ----   --------    --------------------    --------
     JP 2004305024         A2    20041104    JP 2003-99235           20030402
PRIORITY APPLN. INFO.:                       JP 2003-99235           20030402
AB   A method and a reagent are provided for conveniently regulating an enzymic
     activity (e.g., glucose dehydrogenase) without causing the inactivation of
     the enzyme.  The method for regulating an enzymic activity is
     characterized in that a chelating compound (e.g., polyamine-zinc
     complex) is brought into selectively and reversibly binding to the
     monoester phosphoric acid part of a coenzyme (e.g., NADP).  Also provided
     is a method for enzymically measuring a substance (e.g., inorg.
     phosphorate), which is characterized in that a chelating compound is brought
     into selectively and reversibly binding to the monoester phosphoric acid
     part of a coenzyme.  Also provided is a reagent for enzymically measuring
     a substance, which contains at least a cofactor, an enzyme, substrate, and
     a chelating compound capable of selectively and reversibly binding to the
     monoester phosphoric acid part of the coenzyme.
IT   122413-32-5
     RL: RCT (Reactant); RACT (Reactant or reagent)
```
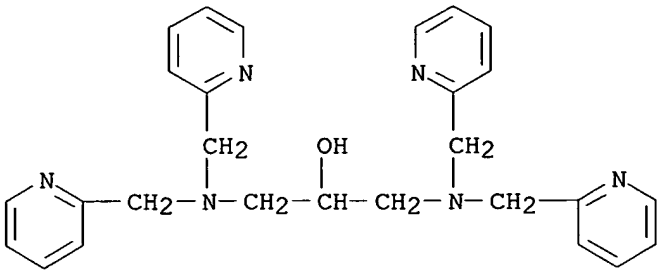

(method and reagent for regulating enzymic activity using cofactor-chelating agent)

RN 122413-32-5 CAPLUS

CN 2-Propanol, 1,3-bis[bis(2-pyridinylmethyl)amino]- (9CI) (CA INDEX NAME)



L8 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:274853 CAPLUS

DOCUMENT NUMBER: 141:60484

TITLE: Recognition of phosphate monoester dianion by an alkoxide-bridged dinuclear **zinc**(II) complex

AUTHOR(S): Kinoshita, Eiji; Takahashi, Makoto; Takeda, Hironori; Shiro, Motoo; Koike, Tohru

CORPORATE SOURCE: Department of Functional Molecular Science, Graduate School of Biomedical Sciences, Hiroshima University, Minami-ku, 734-8551, Japan

SOURCE: Dalton Transactions (2004), (8), 1189-1193
CODEN: DTARAF; ISSN: 1477-9226

PUBLISHER: Royal Society of Chemistry

DOCUMENT TYPE: Journal

LANGUAGE: English

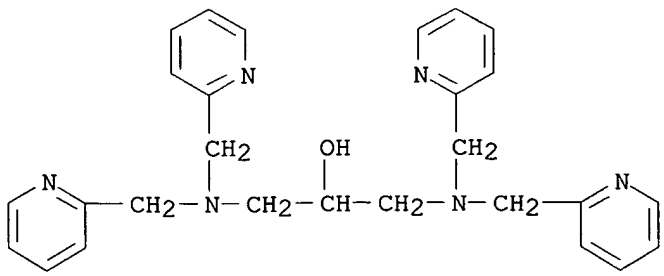
AB Recognition of phosphate monoester dianion by an alkoxide-bridged dinuclear **zinc**(II) complex (Zn2L3+) has been studied (L = alkoxide species of 1,3-bis[bis(pyridin-2-ylmethyl)amino]propan-2-ol). Potentiometric pH titration study disclosed a 1:1 Ph phosphate complexation with Zn2L3+ in aqueous solution The dissociation constant (= [Zn2L3+][PhOPO32-]/[Zn2L3+-PhOPO32-]) is an extremely small value of 2.5 + 10-8 mol dm-3 at 25 °C with I = 0.10 (NaNO3). The X-ray crystal anal. of the dizinc(II) complex with p-nitrophenyl phosphate showed that the phosphate dianion binds as a bridging ligand to the two **zinc**(II) ions.

IT **122413-32-5**

RL: RCT (Reactant); RACT (Reactant or reagent)
(phosphate monoester dianion recognition of by alkoxide-bridged dinuclear **zinc**(2+) complex as studied by potentiometry)

RN 122413-32-5 CAPLUS

CN 2-Propanol, 1,3-bis[bis(2-pyridinylmethyl)amino]- (9CI) (CA INDEX NAME)



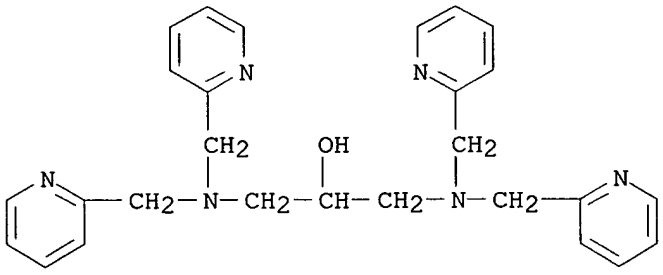
REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:104944 CAPLUS
DOCUMENT NUMBER: 140:423909
TITLE: Dinuclear Zn2+ complexes in the hydrolysis of the phosphodiester linkage in a diribonucleoside monophosphate diester
AUTHOR(S): Yashiro, Morio; Kaneiwa, Hideki; Onaka, Kenichi; Komiyama, Makoto
CORPORATE SOURCE: Department of Applied Chemistry, Faculty of Engineering, Tokyo Polytechnic University, Atsugi, Kanagawa, 243-0297, Japan
SOURCE: Dalton Transactions (2004), (4), 605-610
CODEN: DTARAF; ISSN: 1477-9226
PUBLISHER: Royal Society of Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Dizinc complexes that were formed from 2 : 1 mixts. of **Zn**(NO3)2 and dinucleating ligands TPHP (1), TPmX (2) or TPpX (3) in aqueous solns. efficiently hydrolyzed diribonucleoside monophosphate diesters (NpN) under mild conditions. The dinucleating ligand affected the structure of the aquo-hydroxo-dizinc core, resulting in different characteristics in the catalytic activities towards NpN cleavage. The pH-rate profile of ApA cleavage in the presence of (Zn2+)2-1 was sigmoidal, whereas those of (Zn2+)2-2 and (Zn2+)2-3 were bell-shaped. The pH titration study indicated that (Zn2+)2-1 dissocs. only one aquo proton (up to pH 12), whereas (Zn2+)2-2 dissocs. three aquo protons (up to pH 10.7). The observed differences in the pH-rate profile are attributable to the various distributions of the monohydroxo-dizinc species, which are responsible for NpN cleavage. As compared to that using (Zn2+)2-1, the NpN cleavage using (Zn2+)2-2 showed a greater rate constant, with a higher product ratio of 3'-NMP/2'-NMP. The saturation behaviors of the rate, with regard to the concentration of NpN, were analyzed by Michaelis-Menten type kinetics. Although the binding of (Zn2+)2-2 to ApA was weaker than that of (Zn2+)2-1, (Zn2+)2-2 showed a greater kcat value than (Zn2+)2-1, resulting in higher ApA cleavage activity of the former.

IT **122413-32-5**
RL: PRP (Properties); RCT (Reactant); RACT (Reactant or reagent)
(dinuclear Zn2+ complexes in hydrolysis of the phosphodiester linkage in diribonucleoside monophosphate diester)

RN 122413-32-5 CAPLUS
CN 2-Propanol, 1,3-bis[bis(2-pyridinylmethyl)amino]- (9CI) (CA INDEX NAME)

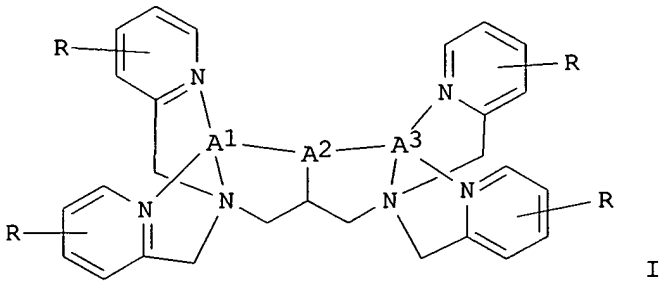


REFERENCE COUNT: 64 THERE ARE 64 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2003:511300 CAPLUS
DOCUMENT NUMBER: 139:94262
TITLE: Preparation of **zinc** complexes capable of scavenging substances bearing anionic substituents
INVENTOR(S): Koike, Tohru; Suzuki, Masatatsu; Shionoya, Mitsuhiko
PATENT ASSIGNEE(S): Japan
SOURCE: PCT Int. Appl., 61 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

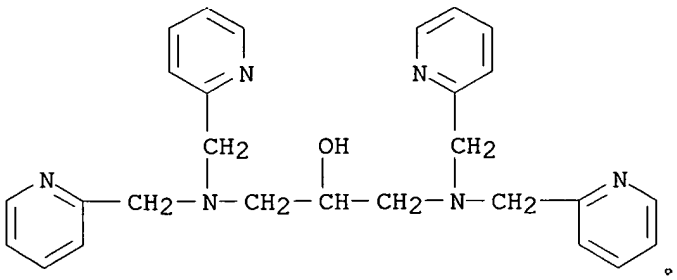
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003053932	A1	20030703	WO 2002-JP13341	20021220
W: DE, JP, US				
US 2005038258	A1	20050217	US 2004-878131	20040621
PRIORITY APPLN. INFO.:			JP 2001-390395 A	20011221
			WO 2002-JP13341 A1	20021220

OTHER SOURCE(S): MARPAT 139:94262
GI

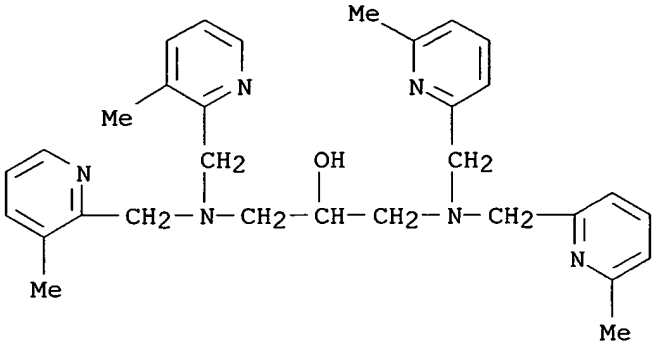


I

AB The title compds. I [R = H, C1-C16 alkyl, etc.; A1 = A3 = Zn2+; A2 = O-] are prepared I are useful as additives in mass spectrometry, NMR, etc.
IT **122413-32-5 553645-33-3**
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of **zinc** complexes capable of scavenging substances bearing anionic substituents useful in mass spectrometry and NMR)
RN 122413-32-5 CAPLUS
CN 2-Propanol, 1,3-bis[bis(2-pyridinylmethyl)amino]- (9CI) (CA INDEX NAME)



RN 553645-33-3 CAPLUS
CN 2-Propanol, 1-[bis[(3-methyl-2-pyridinyl)methyl]amino]-3-[bis[(6-methyl-2-pyridinyl)methyl]amino]- (9CI) (CA INDEX NAME)



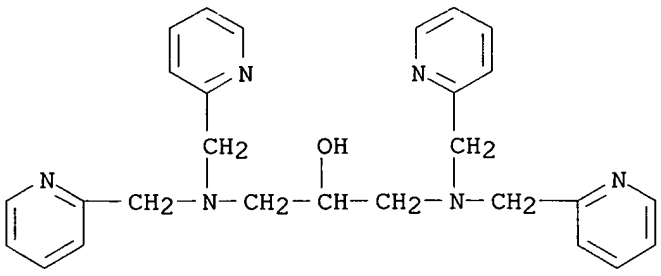
REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2002:174647 CAPLUS
DOCUMENT NUMBER: 137:72017
TITLE: **Zinc**(II) complexes of tetrapodal ligands derived from tetra-substituted 1,n-diaminoalcohols
AUTHOR(S): Adams, Harry; Bradshaw, Darren; Fenton, David E.
CORPORATE SOURCE: Department of Chemistry, The University of Sheffield, Sheffield, S3 7HF, UK
SOURCE: Journal of the Chemical Society, Dalton Transactions (2002), (6), 925-930
CODEN: JCSDAA; ISSN: 1472-7773
PUBLISHER: Royal Society of Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 137:72017

AB Dinuclear **Zn**(II) complexes were prepared from one nonsym. and two sym. compartmental ligands in which the pendant arms, bearing pyridyl and phenolic functions, are bridged by spacers derived from 1,n-diaminoalcs. The x-ray crystal structures of four complexes [Zn2L1(OAc)](ClO4)2·MeOH (1a), [Zn2L1(OAc)](BPh4)2·6H2O (2a), [Zn2L2(OAc)](PF6)2 (4a) and [Zn2L3(OAc)]·2.5H2O·1.5MeO H (8a) are reported.

IT **122413-32-5**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction with **zinc** salt)

RN 122413-32-5 CAPLUS
CN 2-Propanol, 1,3-bis[bis(2-pyridinylmethyl)amino]- (9CI) (CA INDEX NAME)

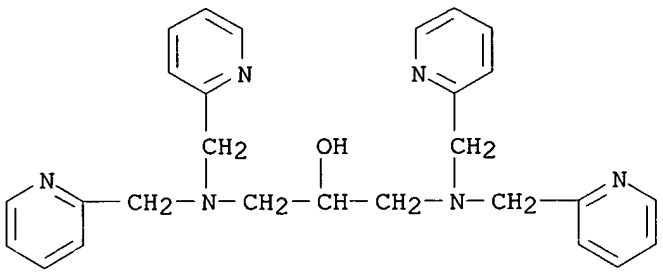


REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

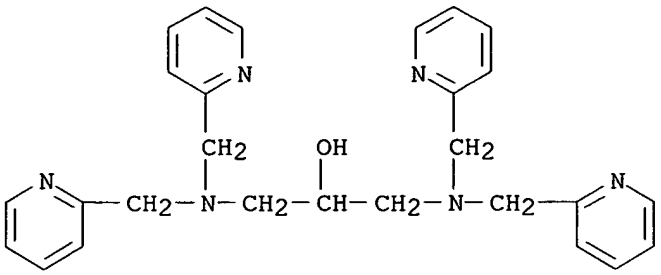
L8 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2001:169459 CAPLUS
DOCUMENT NUMBER: 134:363145
TITLE: Enhanced nucleophilicity and depressed electrophilicity of peroxide by **zinc**(II), aluminum(III) and lanthanum(III) ions
AUTHOR(S): Nishino, Satoshi; Kobayashi, Teruyuki; Matsushima, Hideaki; Tokii, Tadashi; Nishida, Yuzo
CORPORATE SOURCE: Department of Chemistry, Faculty of Science, Yamagata University, Yamagata, 990-8560, Japan
SOURCE: Zeitschrift fuer Naturforschung, C: Journal of Biosciences (2001), 56(1/2), 138-143
CODEN: ZNCBDA; ISSN: 0939-5075
PUBLISHER: Verlag der Zeitschrift fuer Naturforschung
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The binuclear **zinc**(II) complex, [Zn2(HPTP)(CH3COO)]2+ was found highly active to cleave DNA (double-strand super-coiled DNA, pBR322 and ϕ+174) in the presence of hydrogen peroxide. However, no TBARS (2-thiobarbituric acid reactive substance) formation was detected in a solution containing 2-deoxyribose (or 2'-deoxyguanosine, etc); where (HPTP) represents N,N,N'-N'-tetrakis(2-pyridylmethyl)-1,3-diamino-2-propanol. These facts imply that DNA cleavage reaction by the binuclear **Zn** (II)/H2O2 system should be due to a hydrolytic mechanism, which may be attributed to the enhanced nucleophilicity but depressed electrophilicity of the peroxide ion coordinated to the **zinc**(II) ion. DFT (d.-functional theory) calcns. on the peroxide adduct of monomeric **zinc**(II) have supported the above consideration. Similar DFT calcns. on the peroxide adducts of the Al(III) and La(III) compds. have revealed that electrophilicity of the peroxide ion in these compds. is strongly reduced. This gives an important information to elucidate the fact that La3+ can enhance the growth of plants under certain conditions.

IT **122413-32-5**
RL: RCT (Reactant); RACT (Reactant or reagent)
(binuclear **zinc**(II) complex ([**Zn**(HPTP)(CH3COO)]2+) cleaves DNA in presence of hydrogen peroxide)
RN 122413-32-5 CAPLUS
CN 2-Propanol, 1,3-bis[bis(2-pyridinylmethyl)amino]- (9CI) (CA INDEX NAME)

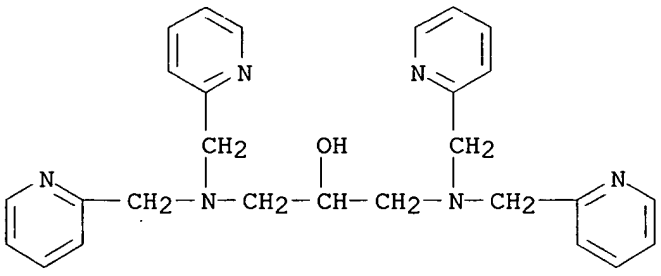


IT **122413-32-5D, Zn**(II) complex
RL: PRP (Properties)
(enhanced nucleophilicity and depressed electrophilicity of peroxide by **zinc**(II), aluminum(III) and lanthanum(III) ions)
RN 122413-32-5 CAPLUS
CN 2-Propanol, 1,3-bis[bis(2-pyridinylmethyl)amino]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1996:683864 CAPLUS
DOCUMENT NUMBER: 125:320798
TITLE: Trinuclear **Zn**(II) complex for the efficient and structure dependent hydrolysis of RNA
AUTHOR(S): Yashiro, Morio; Ishikubo, Akira; Komiyama, Makoto
CORPORATE SOURCE: Dep. Chem. Biotechnol., Univ. Tokyo, Tokyo, 113, Japan
SOURCE: Nucleic Acids Symposium Series (1996), 35(Twentythird Symposium on Nucleic Acids Chemistry, 1996), 103-104
CODEN: NACSD8; ISSN: 0261-3166
PUBLISHER: Oxford University Press
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A trinuclear **Zn**(II) complex is newly prepared using a ligand having six pyridine moieties, N,N,N',N',N'',N''-hexakis(2-pyridylmethyl){tris-(2-aminoethyl)amine} (L1). The trinuclear **Zn**(II)3-L1 complex efficiently hydrolyzes diribonucleotides at pH 7 and 50 °C; its activity is much greater than that of a dinuclear (**Zn**(II))2-(1,3-bis[bis(2-pyridinylmethyl)amino]-2-propanol) complex. The hydrolysis by the trinuclear **Zn**(II)3-L1 complex is also unique in the product ratio; highly selective over the 2'-monophosphate is observed
IT **122413-32-5D**, 2-Propanol, 1,3-bis[bis(2-pyridinylmethyl)amino]-, **zinc** complex
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(trinuclear **zinc**(II) complex for efficient and structure dependent hydrolysis of RNA)
RN 122413-32-5 CAPLUS
CN 2-Propanol, 1,3-bis[bis(2-pyridinylmethyl)amino]- (9CI) (CA INDEX NAME)

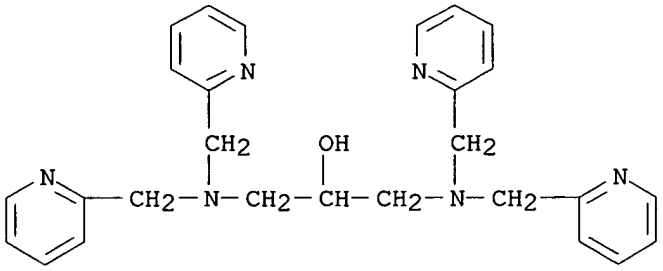


L8 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1996:85591 CAPLUS

DOCUMENT NUMBER: 124:197628
TITLE: Dinuclear metal complexes for efficient RNA hydrolysis
AUTHOR(S): Ishikubo, Akira; Yashiro, Morio; Komiyama, Makoto
CORPORATE SOURCE: Dep. Chem. Biotechnol., Grad. Sch. Eng., Univ. Tokyo, Hongo, Bunkyo-ku, Tokyo, 113, Japan
SOURCE: Nucleic Acids Symposium Series (1995), 34(Twentysecond Symposium on Nucleic Acids Chemistry, 1995), 85-6
CODEN: NACSD8; ISSN: 0261-3166
PUBLISHER: IRL Press
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Dinuclear **Zn**(II) and La(III) complexes with TPHP efficiently hydrolyze a dinucleotide, ApA, under mild conditions (TPHP = N,N,N',N'-tetrakis[(2-pyridyl)methyl]-2-hydroxy-1,3-diaminopropane). [Zn2(TPHP)]3+ hydrolyzes ApA with an extremely high activity; the pseudo-first-order rate constant is 8.4 + 10-4 h-1 at pH 7, 50° when [[Zn2(TPHP)]3+] = 2.5 mM. Free **Zn**(II) ion shows no hydrolysis activity under the conditions. Enormous acceleration of the hydrolysis by the dinuclear complex formation was also observed for La(III) ion. Its activity for the ApA hydrolysis is 100-fold greater than that of free La(III) ion. These dinuclear complexes are promising for the active sites of artificial RNases.

IT **122413-32-5D**, metal complexes
RL: RCT (Reactant); RACT (Reactant or reagent)
(dinuclear metal complexes for efficient RNA hydrolysis)
RN 122413-32-5 CAPLUS
CN 2-Propanol, 1,3-bis[bis(2-pyridinylmethyl)amino]- (9CI) (CA INDEX NAME)



L8 ANSWER 9 OF 9 CAPLUS
ACCESSION NUMBER: 1995:805448 CAPLUS
DOCUMENT NUMBER: 124:74662
TITLE: Preparation and study of dinuclear **zinc**(II) complex for the efficient hydrolysis of the phosphodiester linkage in a diribonucleotide
AUTHOR(S): Yashiro, Morio; Ishikubo, Akira; Komiyama, Makoto
CORPORATE SOURCE: Fac. Eng., Univ. Tokyo, Tokyo, 113, Japan
SOURCE: Journal of the Chemical Society, Chemical Communications (1995), (17), 1793-4
CODEN: JCCCAT; ISSN: 0022-4936
PUBLISHER: Royal Society of Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English

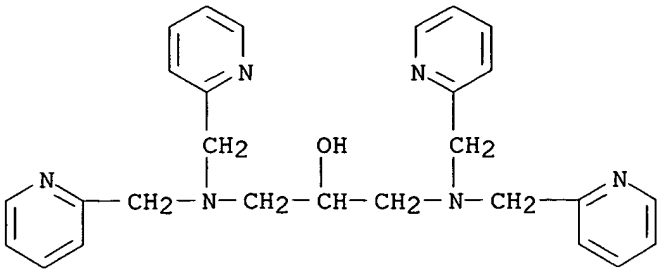
AB A dinuclear **zinc**(II) complex with N,N,N',N'-tetrakis[(2-pyridyl)methyl]-2-hydroxy-1,3-diaminopropane efficiently hydrolyses ApA [adenylyl(3'-5')adenosine] at pH 7 and 50°C; the complex can thus be regarded as a good artificial RNase which effectively mimics enzyme active sites.

IT **122413-32-5**
RL: RCT (Reactant); RACT (Reactant or reagent)

(for formation of mono- and dinuclear **zinc** complexes of tetrakis(pyridylmethyl)diaminopropanol)

RN 122413-32-5 CAPLUS

CN 2-Propanol, 1,3-bis[bis(2-pyridinylmethyl)amino]- (9CI) (CA INDEX NAME)



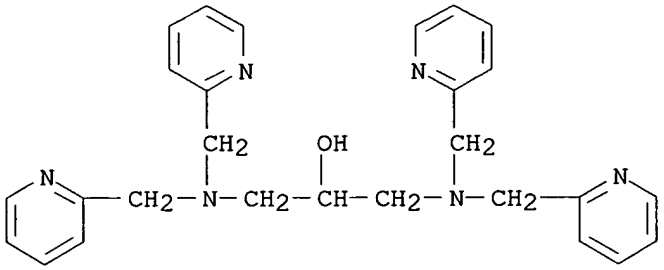
IT **122413-32-5D, zinc** complex

RL: FMU (Formation, unclassified); RCT (Reactant); FORM (Formation, nonpreparative); RACT (Reactant or reagent)

(preparation and study of dinuclear **zinc** complex for hydrolysis of phosphodiester linkage in diribonucleotides)

RN 122413-32-5 CAPLUS

CN 2-Propanol, 1,3-bis[bis(2-pyridinylmethyl)amino]- (9CI) (CA INDEX NAME)



=> s l4 and (antibody or antigen or immunogen or carrier or avidin)

284457 ANTIBODY

331868 ANTIBODIES

446092 ANTIBODY

(ANTIBODY OR ANTIBODIES)

280714 ANTIGEN

224389 ANTIGENS

352649 ANTIGEN

(ANTIGEN OR ANTIGENS)

6048 IMMUNOGEN

3371 IMMUNOGENS

8443 IMMUNOGEN

(IMMUNOGEN OR IMMUNOGENS)

258419 CARRIER

143456 CARRIERS

337397 CARRIER

(CARRIER OR CARRIERS)

7642 AVIDIN

4385 AVIDINS

9225 AVIDIN

(AVIDIN OR AVIDINS)

L9 1 L4 AND (ANTIBODY OR ANTIGEN OR IMMUNOGEN OR CARRIER OR AVIDIN)

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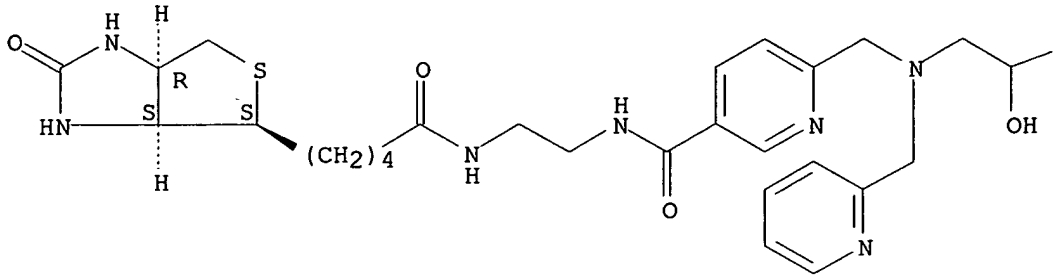
L9 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2005:398746 CAPLUS
DOCUMENT NUMBER: 143:93356
TITLE: Detection and Quantification of On-Chip Phosphorylated Peptides by Surface Plasmon Resonance Imaging Techniques Using a Phosphate Capture Molecule
AUTHOR(S): Inamori, Kazuki; Kyo, Motoki; Nishiya, Yoshiaki; Inoue, Yusuke; Sonoda, Tatsuhiko; Kinoshita, Eiji; Koike, Tohru; Katayama, Yoshiki
CORPORATE SOURCE: Biotechnology Frontier Project, Toyobo Co. Ltd., Tsuruga, Fukui, 914-0047, Japan
SOURCE: Analytical Chemistry (2005), 77(13), 3979-3985
CODEN: ANCHAM; ISSN: 0003-2700
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The authors describe herein a detection and quantification system for on-chip phosphorylation of peptides by surface plasmon resonance (SPR) imaging techniques using a newly synthesized phosphate capture mol. (i.e., biotinylated zinc(II) complex). The biotinylated compound is a dinuclear zinc(II) complex that is suitable for accessing phosphate anions as a bridging ligand on the two zinc(II) ions. The compound was exposed on the peptide array and detected with streptavidin (SA) via a biotin-SA interaction by SPR imaging. In the conventional method using **antibody**, both anti-phosphoserine and anti-phosphotyrosine **antibodies** were required for phosphoserine and phosphotyrosine detection, resp. Detection of the phosphate group by the zinc(II) complex, however, was independent of the phosphorylated amino acid residues. The calibration curve for the phosphorylation ratios was established with a calibration chip, on which phosphoserine-containing peptide probes were immobilized. The peptide probes, which were phosphorylated on the surface by protein kinase A, were detected and quantified by SPR imaging using the zinc(II) complex, SA, and anti-SA **antibody**. The reaction rate and the kinetics of on-chip phosphorylation were also evaluated with the peptide array. The phosphorylation ratio was saturated at .apprx.20% in 2 h in this study.

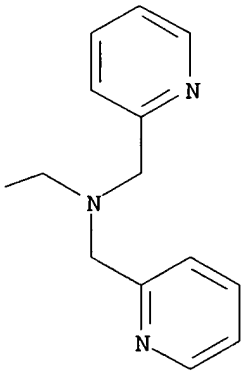
IT **753451-66-0P**
RL: PUR (Purification or recovery); SPN (Synthetic preparation); PREP (Preparation)
(preparation and reaction with zinc)
RN 753451-66-0 CAPLUS
CN 1H-Thieno[3,4-d]imidazole-4-pentanamide, N-[2-[[[6-[[[3-[bis(2-pyridinylmethyl)amino]-2-hydroxypropyl](2-pyridinylmethyl)amino]methyl]-3-pyridinyl]carbonyl]amino]ethyl]hexahydro-2-oxo-, (3aS,4S,6aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



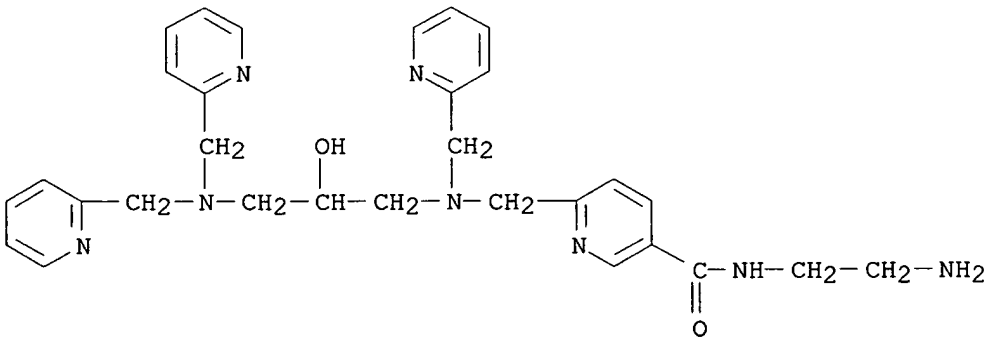
PAGE 1-B



IT **753451-64-8**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction with succuinimidyl biotinate in synthesis of [[biotinaminoethylcarbamoyl]pyridinylmethyl]tris(pyridin-2-ylmethyl)diaminopropanol)

RN 753451-64-8 CAPLUS

CN 3-Pyridinecarboxamide, N-(2-aminoethyl)-6-[[[3-[bis(2-pyridinylmethyl)amino]-2-hydroxypropyl](2-pyridinylmethyl)amino]methyl]- (9CI) (CA INDEX NAME)



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